

FIG. 1

FIG. 2

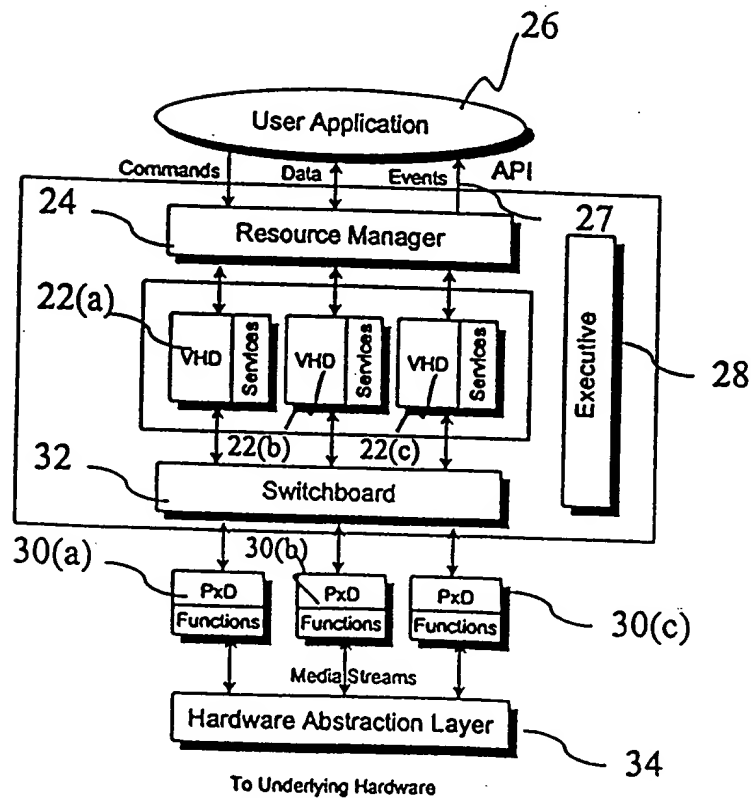
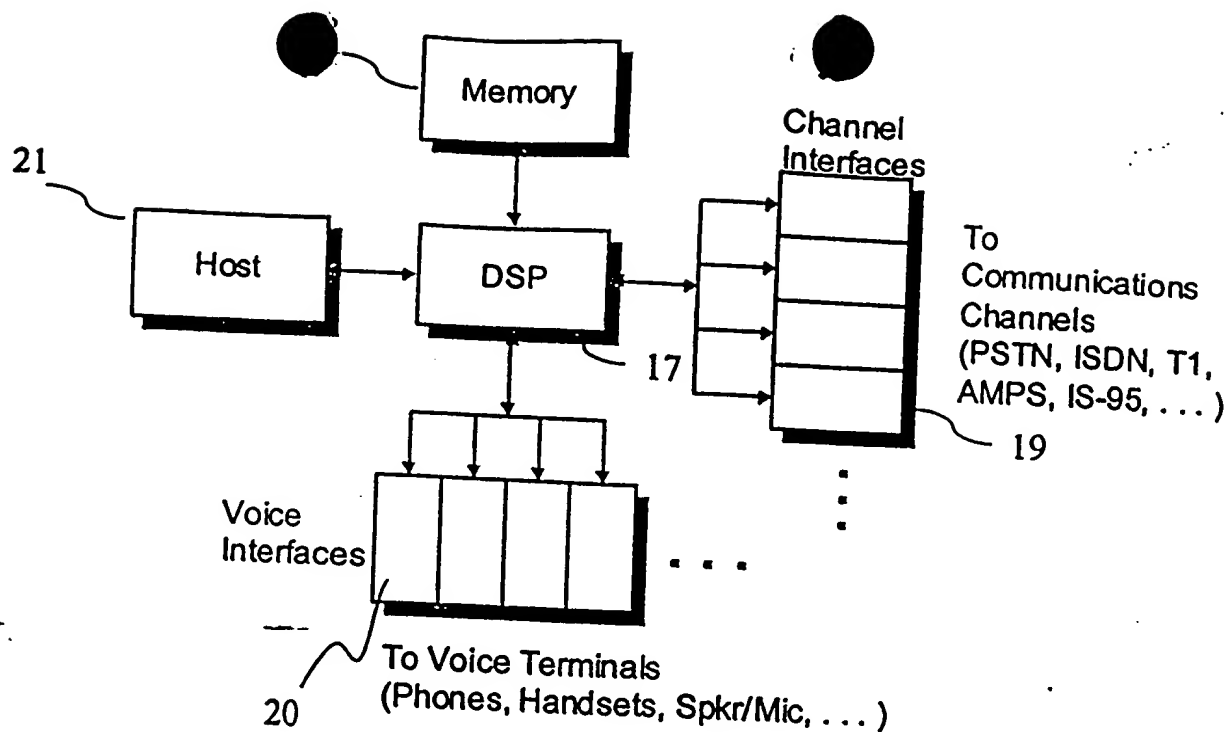


FIG. 3

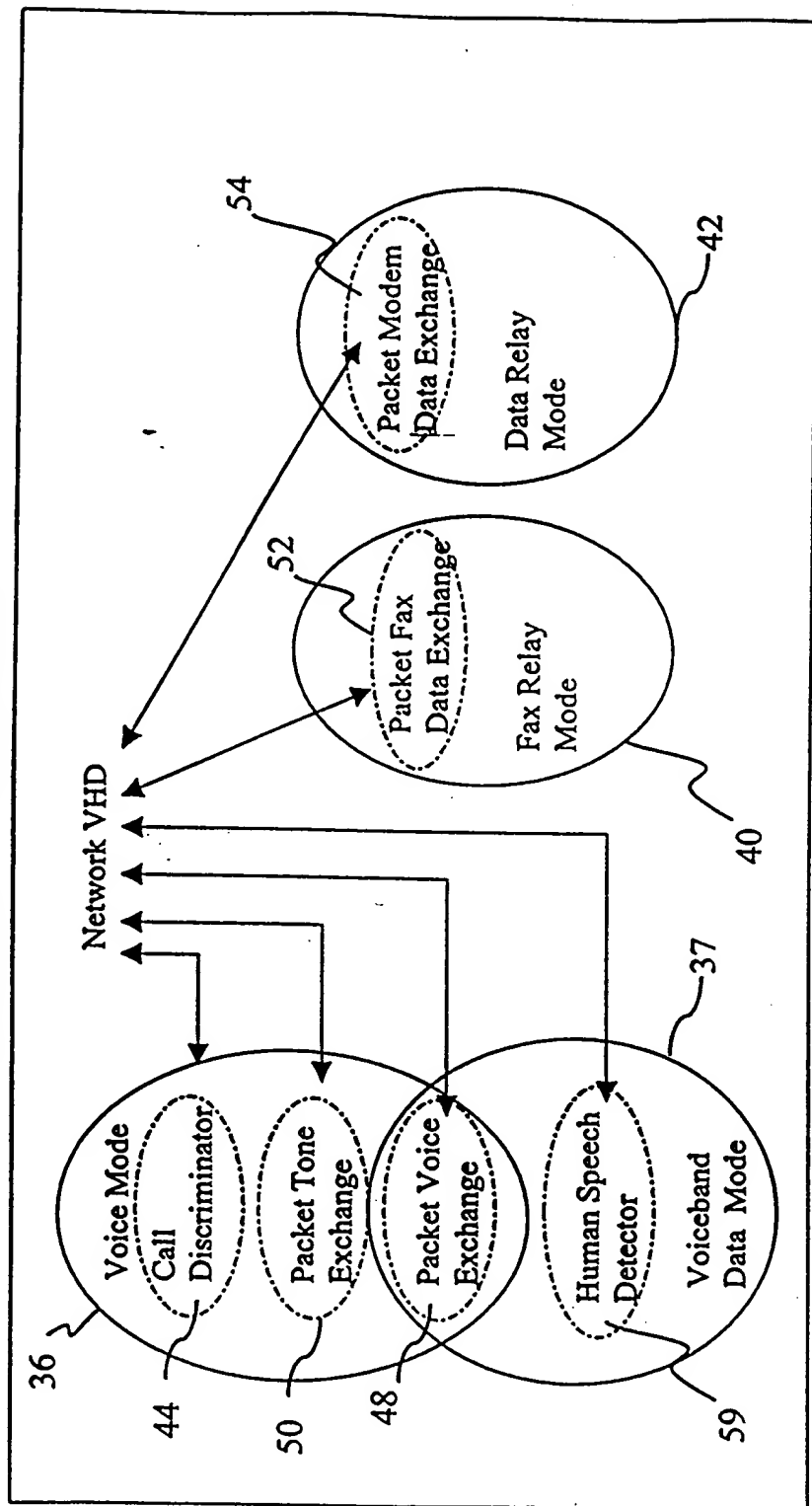


FIG. 4

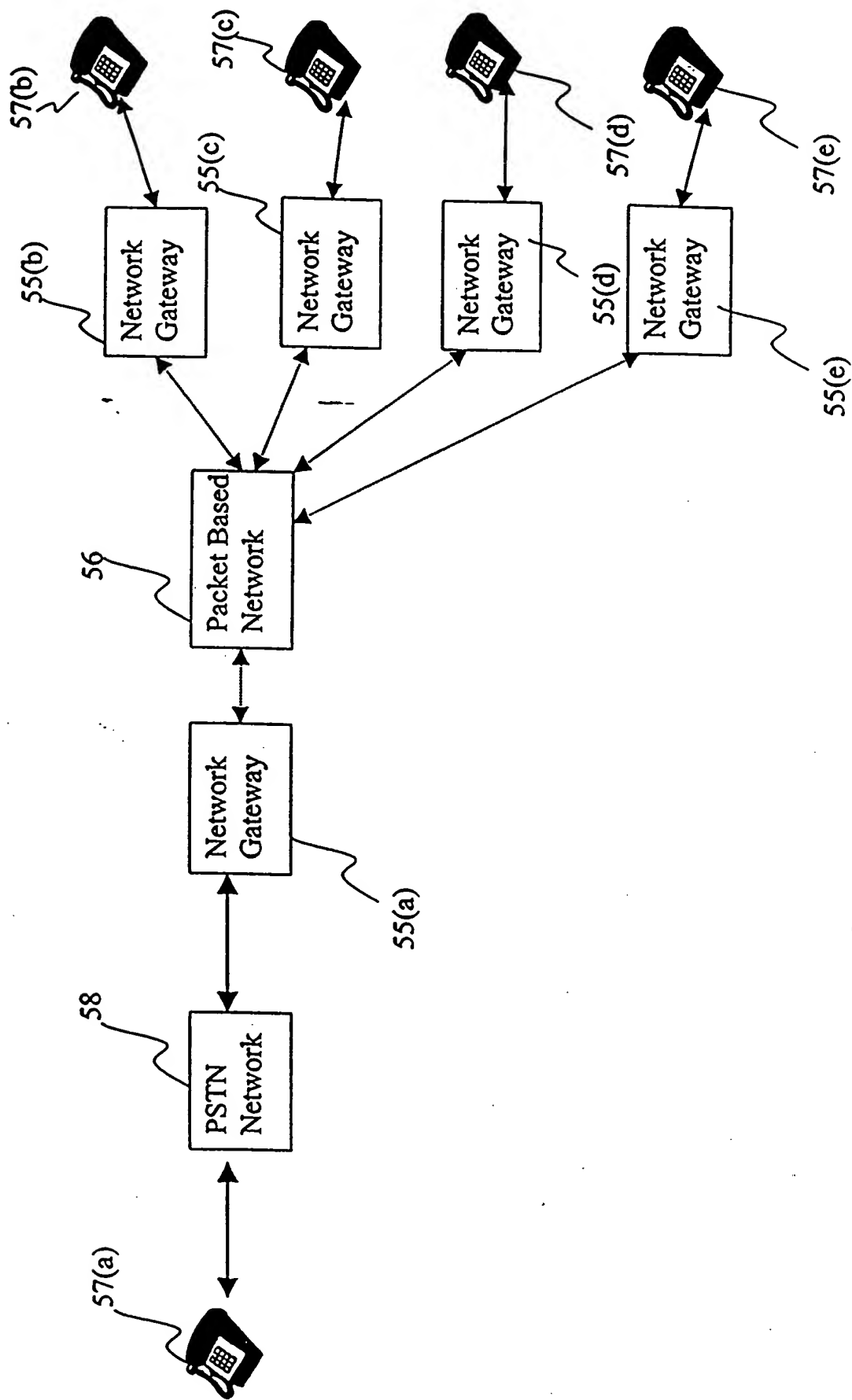
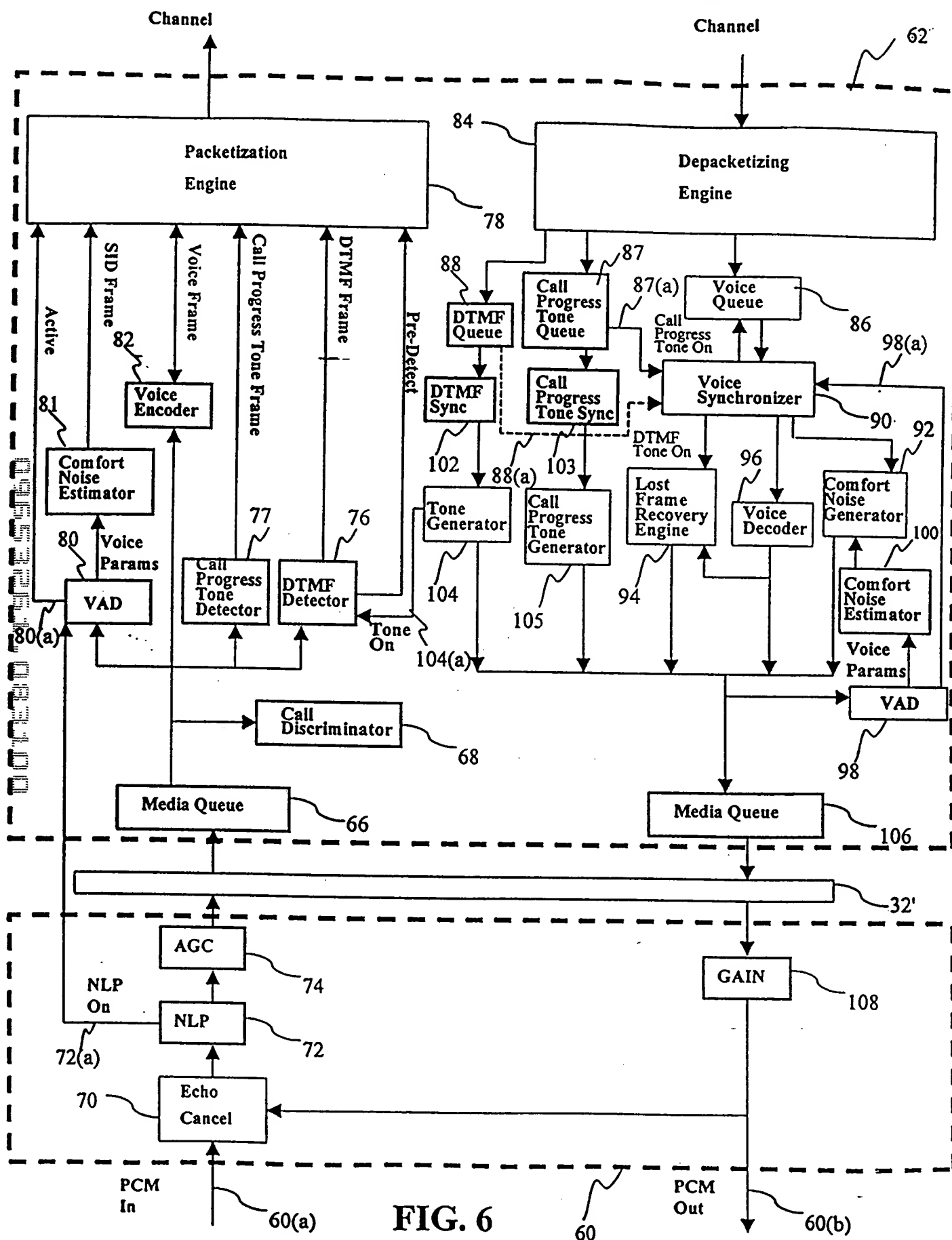
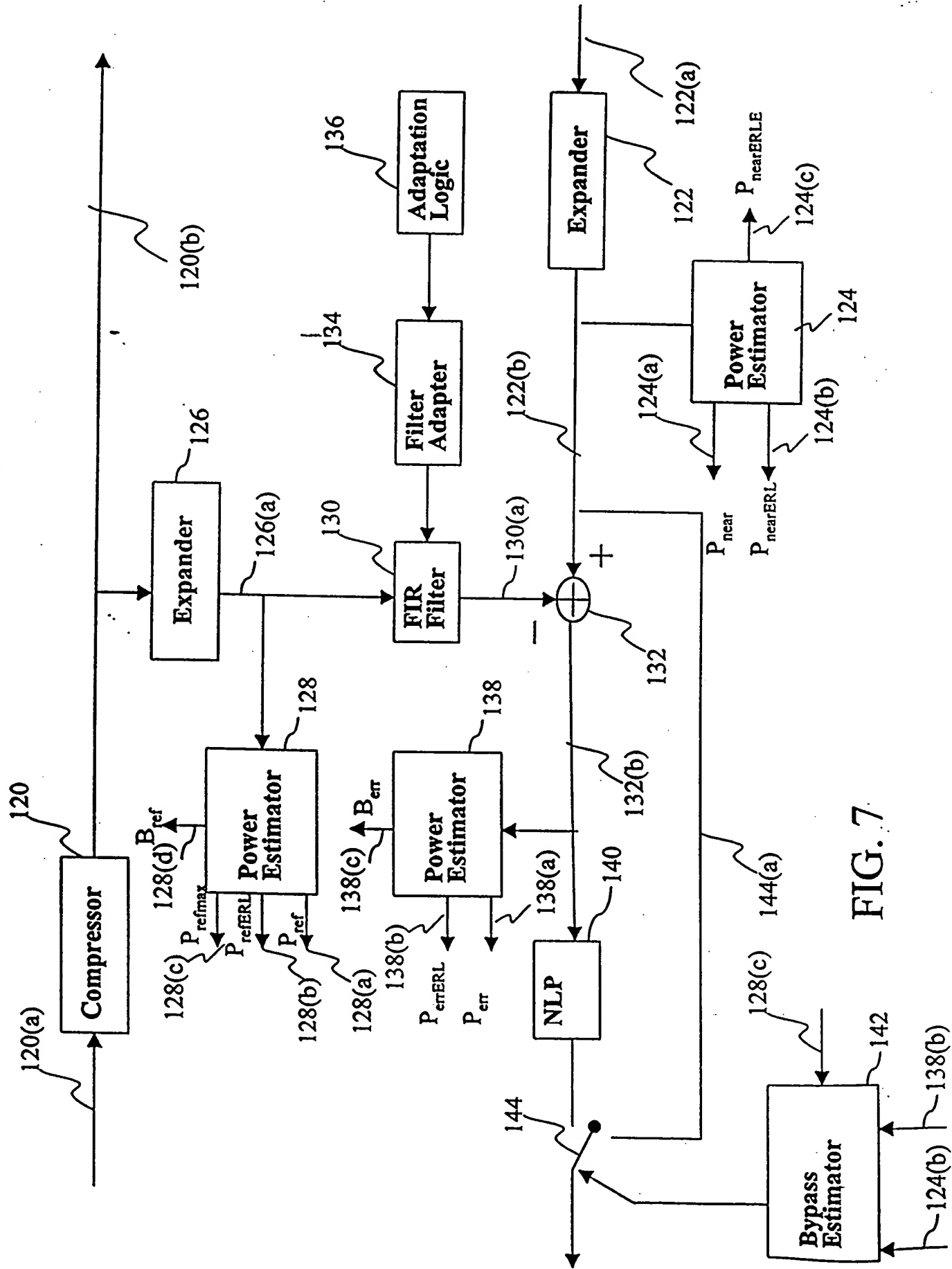


FIG. 5





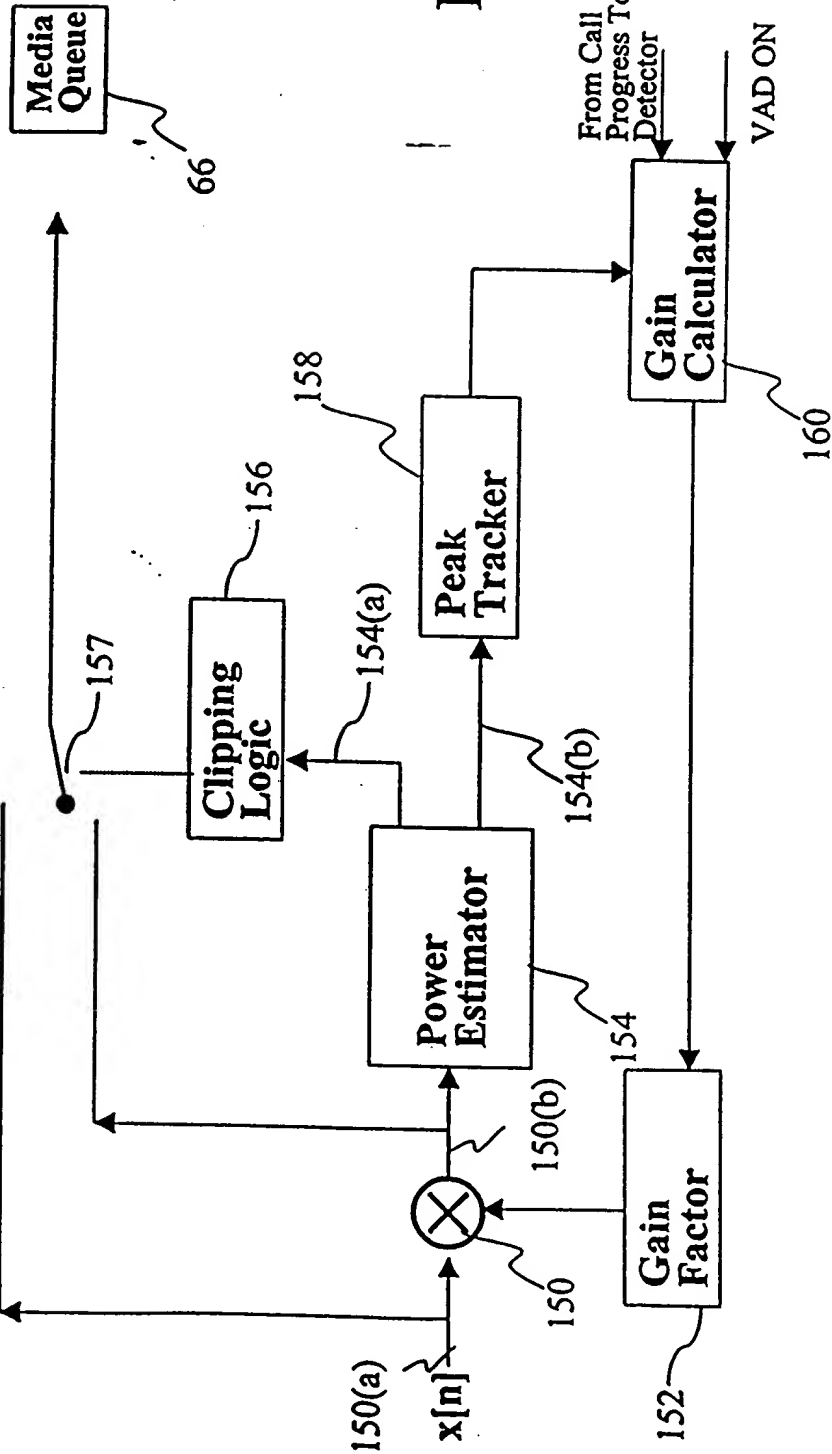


FIG. 8A

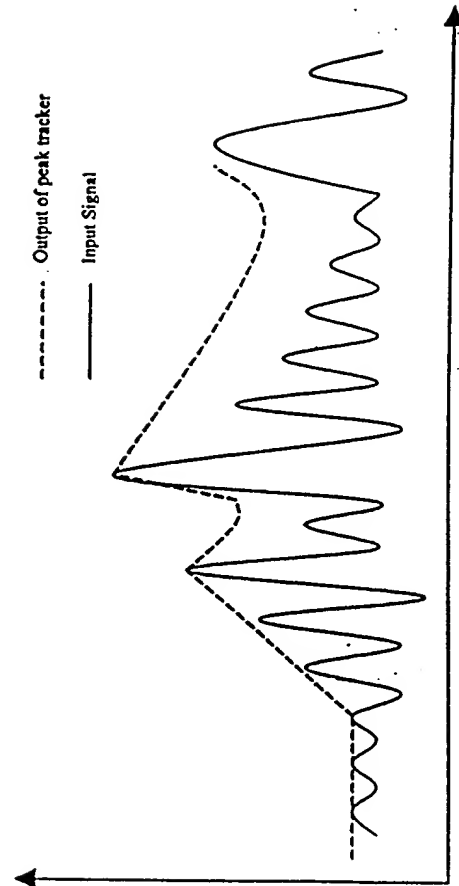


FIG. 8B

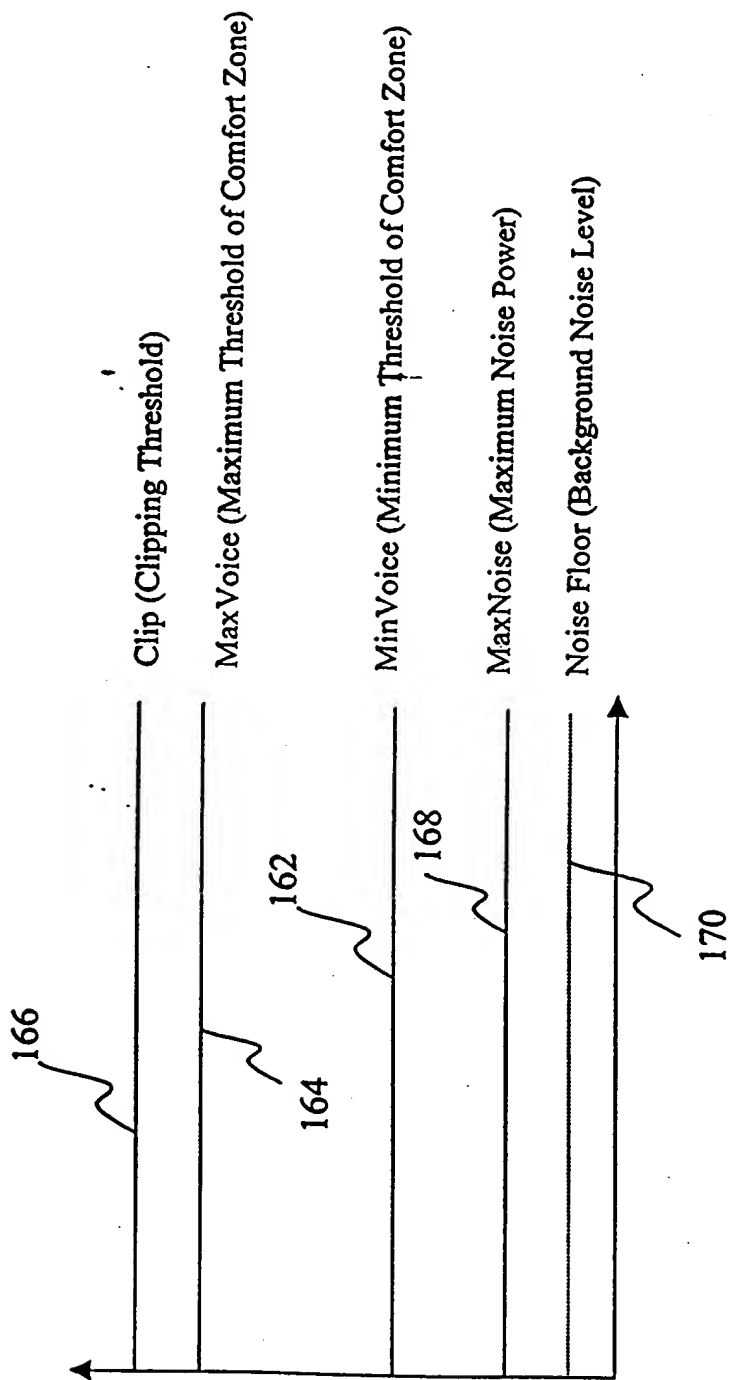


FIG. 9

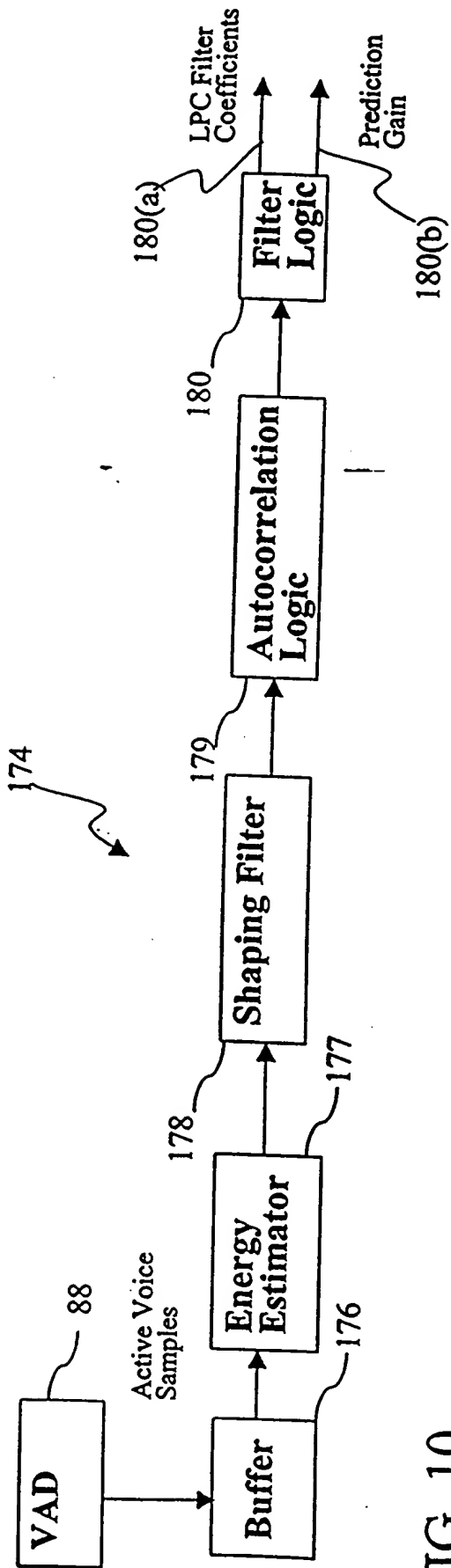


FIG. 10

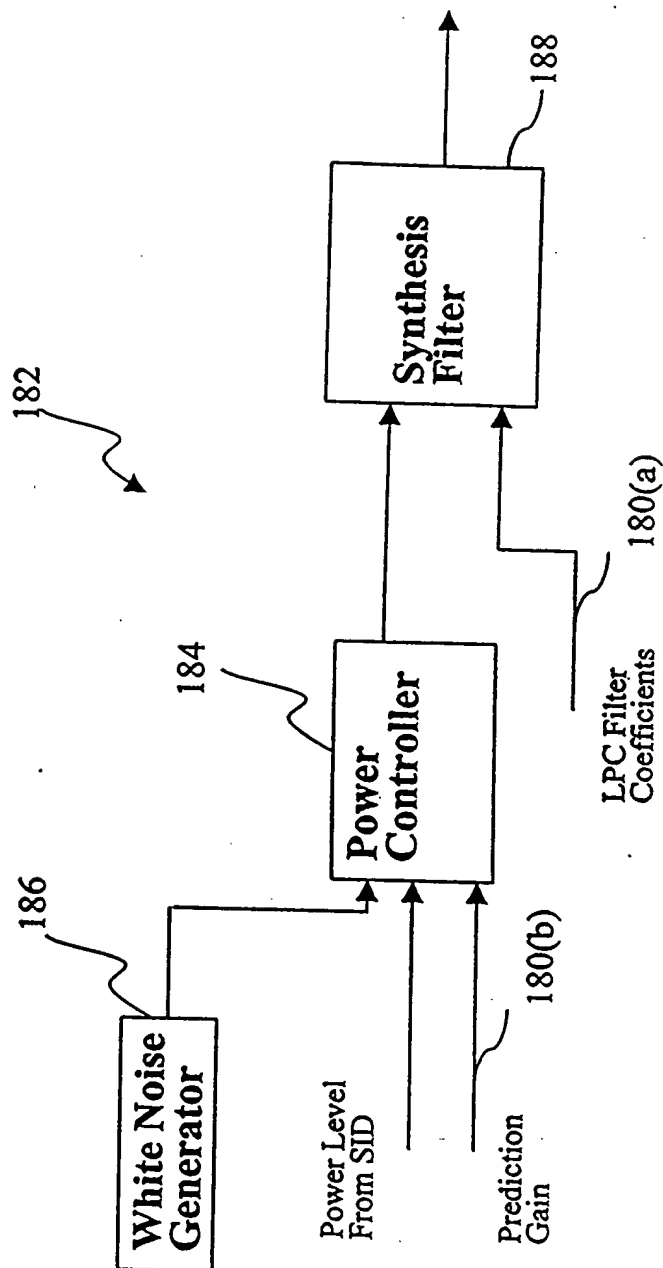


FIG. 11

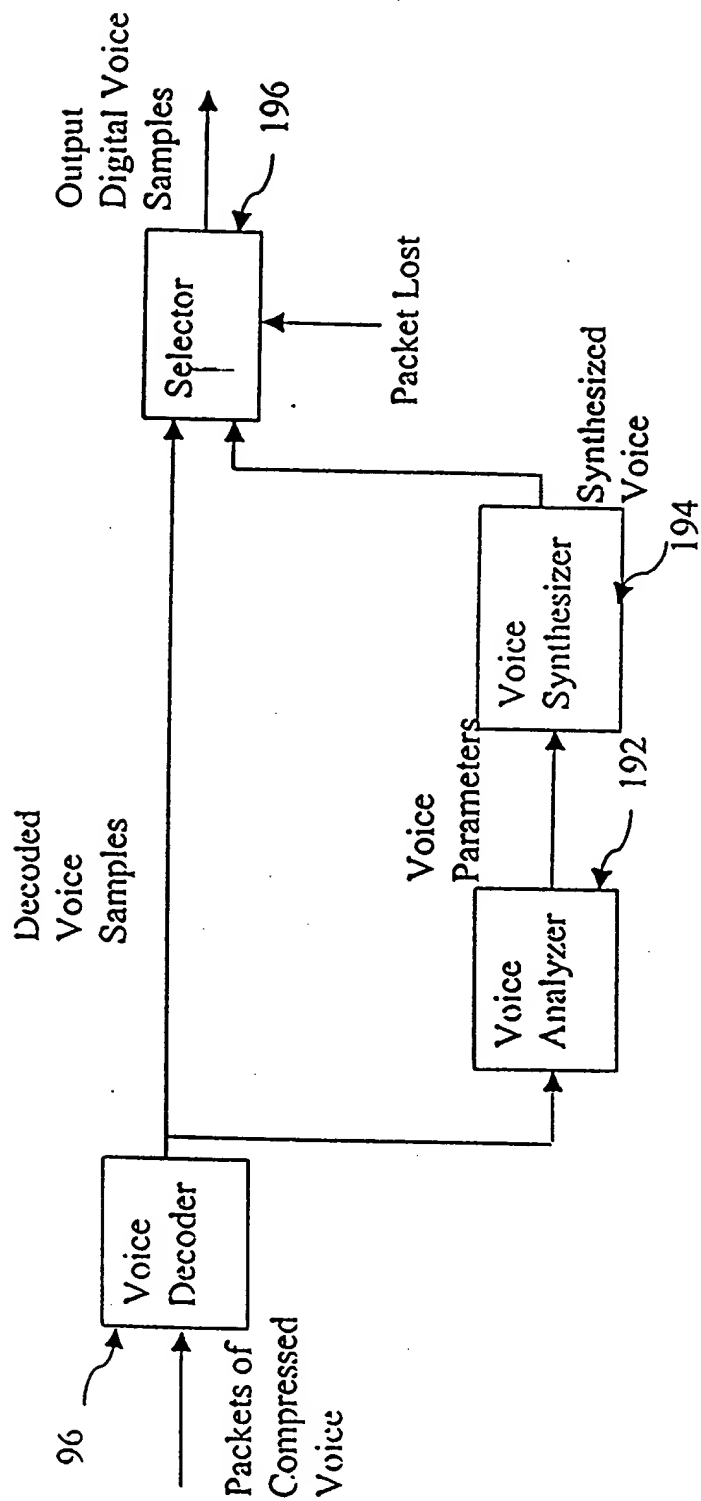


FIG. 12

```

graph TD
    Start([Start]) --> 191{Lost Packet?}
    191 -- Y --> 193{First Lost Packet?}
    191 -- N --> 213{Last Packet was Lost?}
    193 -- Y --> 195[Calculate LPC Parameters  
Calculate Pitch Period and Voicing]
    193 -- N --> 209{More than 12 Lost Packets?}
    195 --> 197{Voiced Speech?}
    197 -- Y --> 199[Calculate Residual Signal  
Excitation gain = 1]
    197 -- N --> 207[Determine Excitation Gain from Prediction Error Power]
    199 --> 201[Synthesize 5 ms of Speech]
    207 --> 201
    201 --> 203[Attenuate Gain Factor]
    203 --> 205[Output 5ms worth of Samples]
    205 --> Finish([Finish])
    209 -- Y --> 211[Generate Silence]
    209 -- N --> 201
    213 -- Y --> 215[Synthesize 2.5 ms of Speech  
Overlap Synthesized Speech and Decoded Speech]
    213 -- N --> 217[Update Speech Analysis Buffer]
    215 --> 217
    217 --> 201

```

FIG. 13A

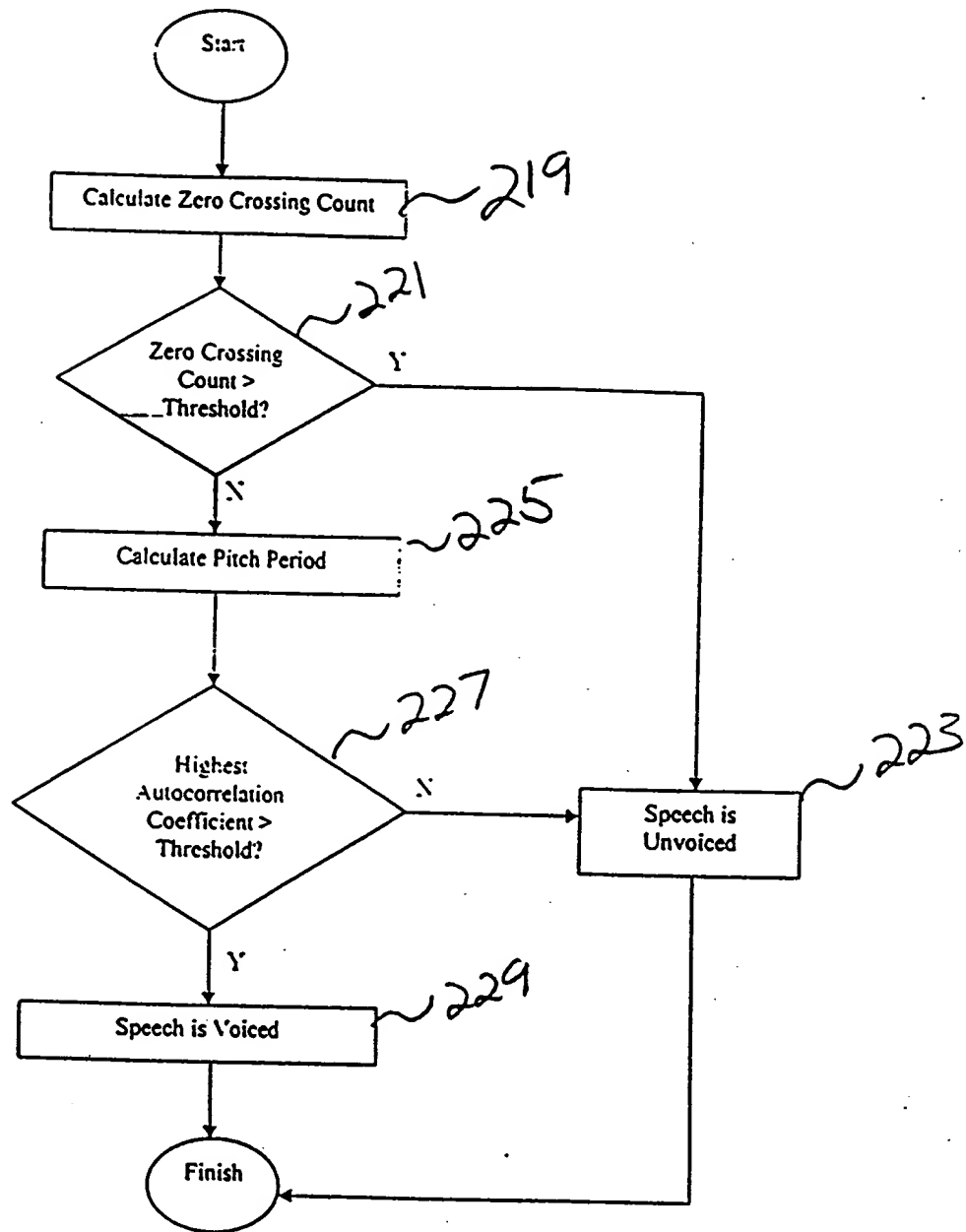


FIG. 13B

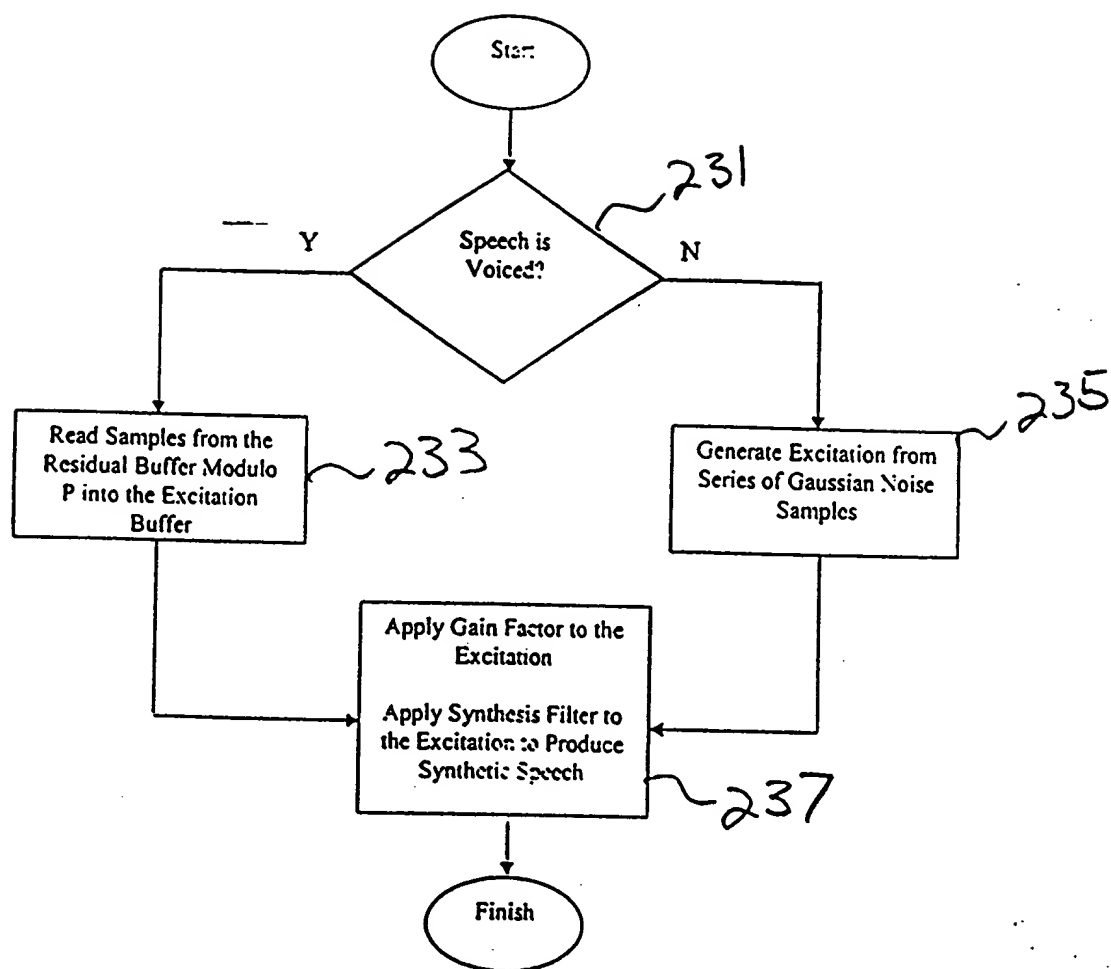


FIG. 13C

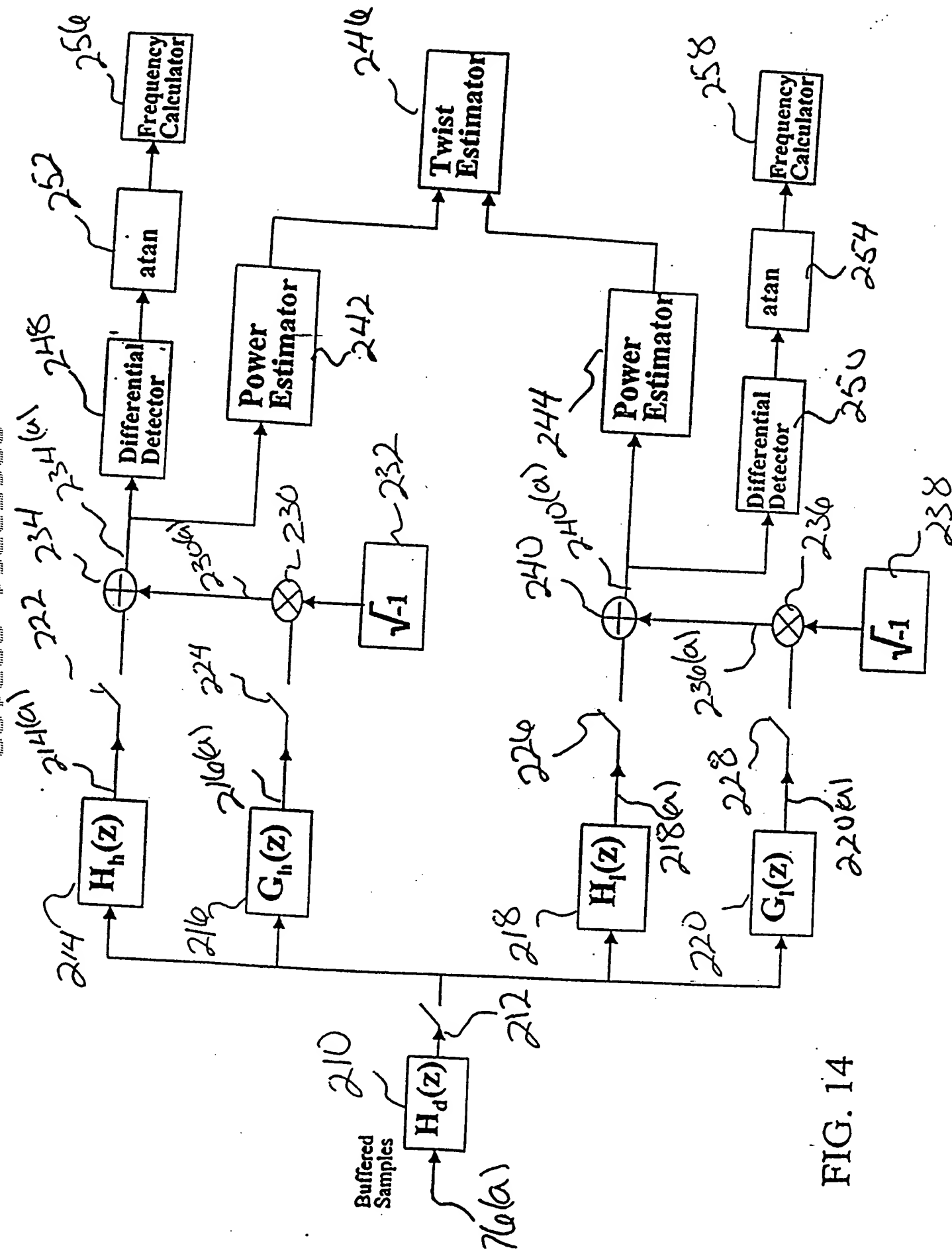


FIG. 14

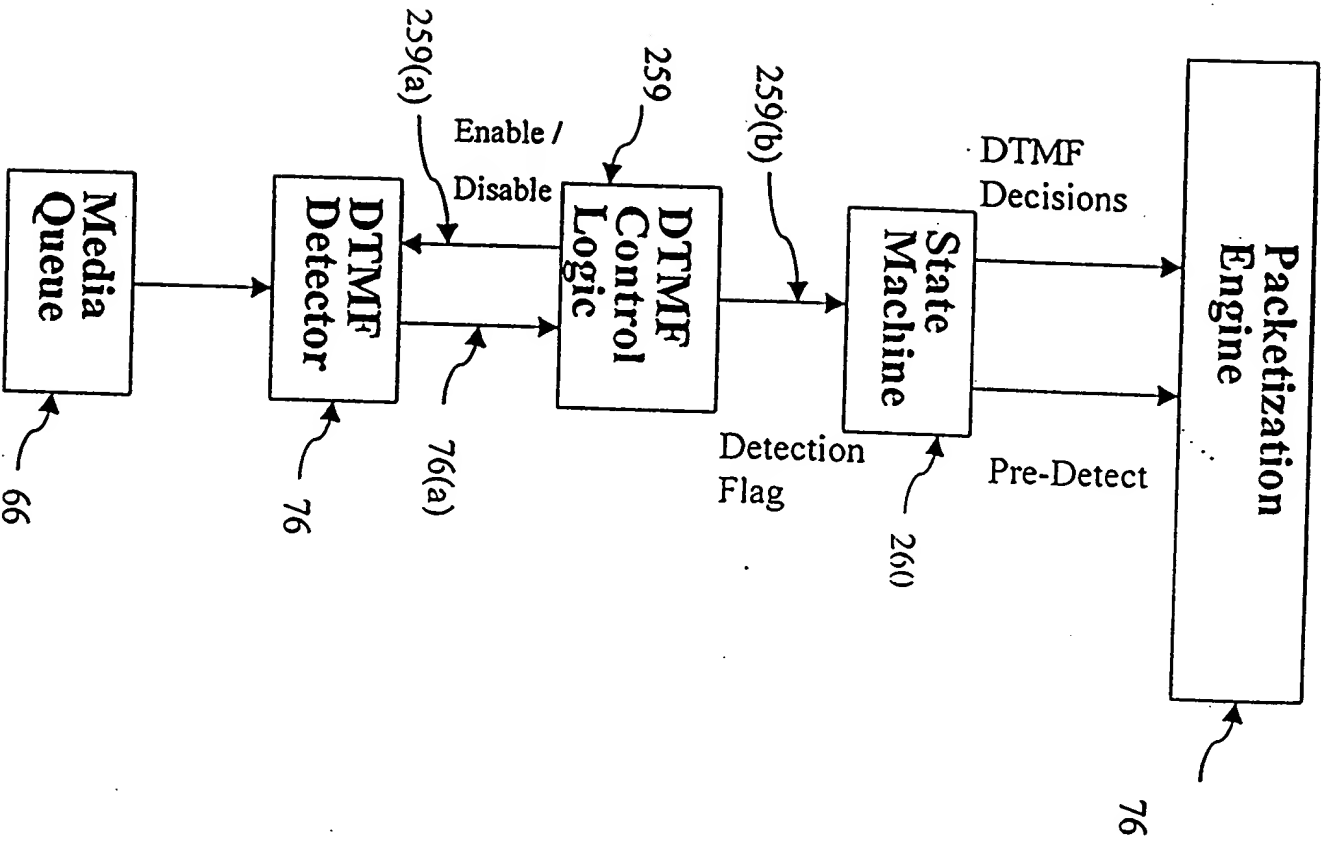


FIG. 14A

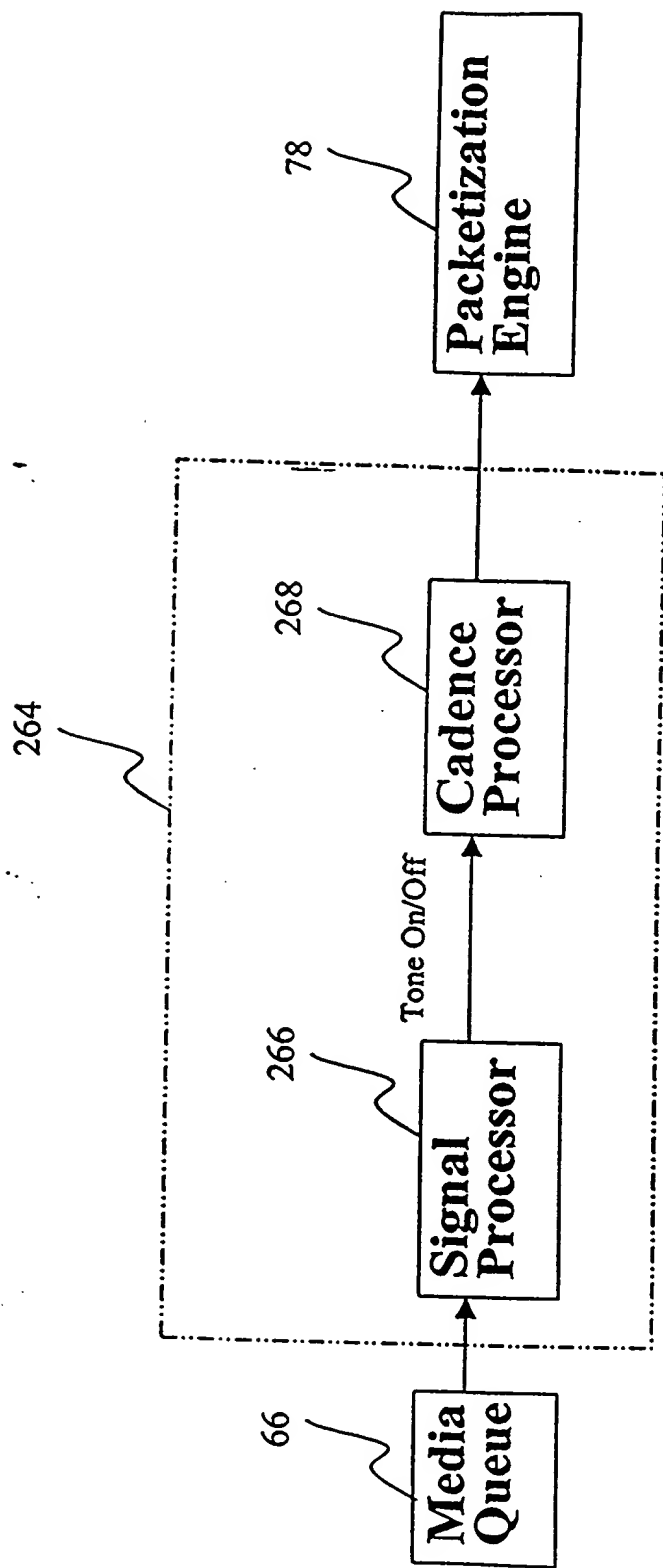


FIG. 15

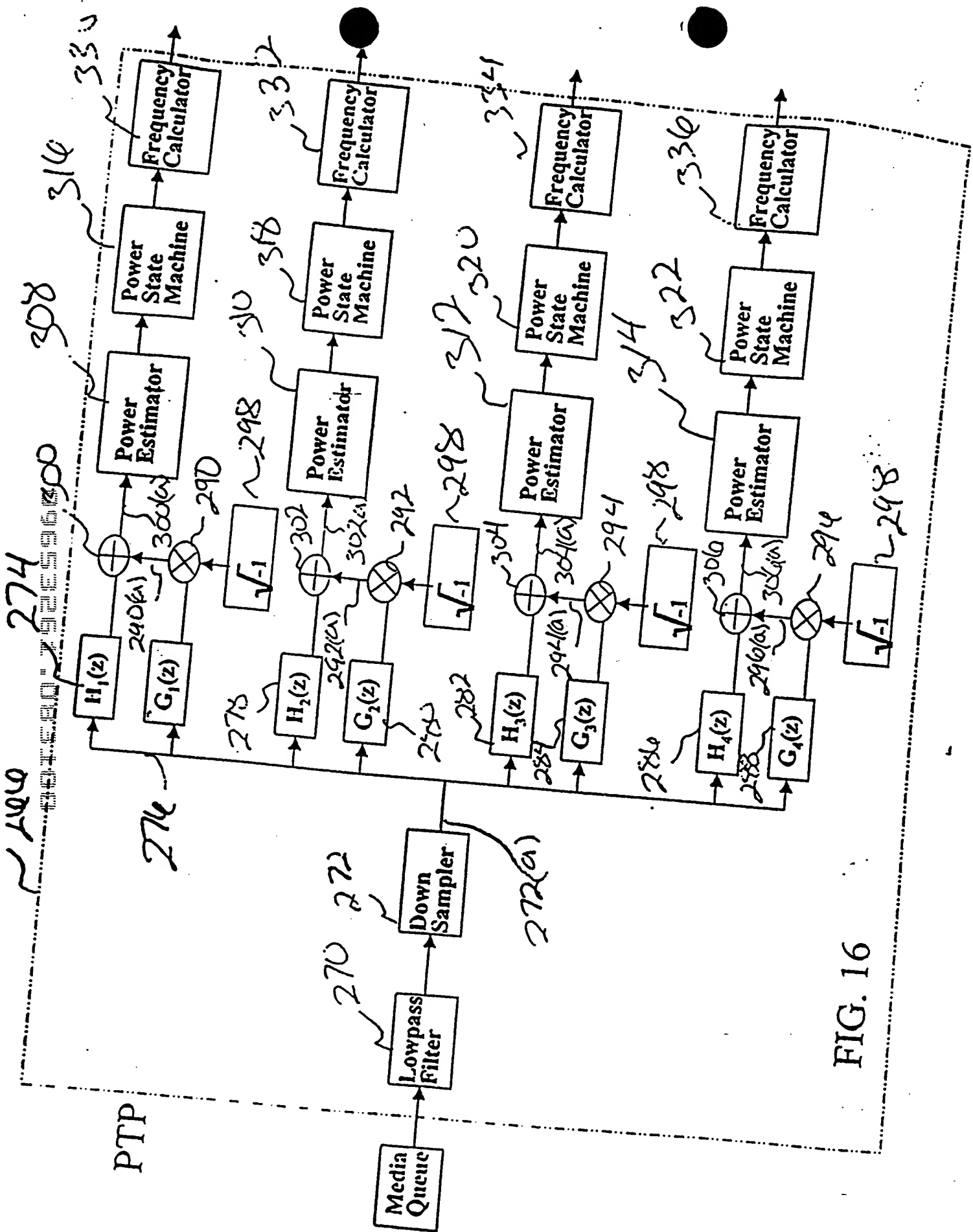


FIG. 16

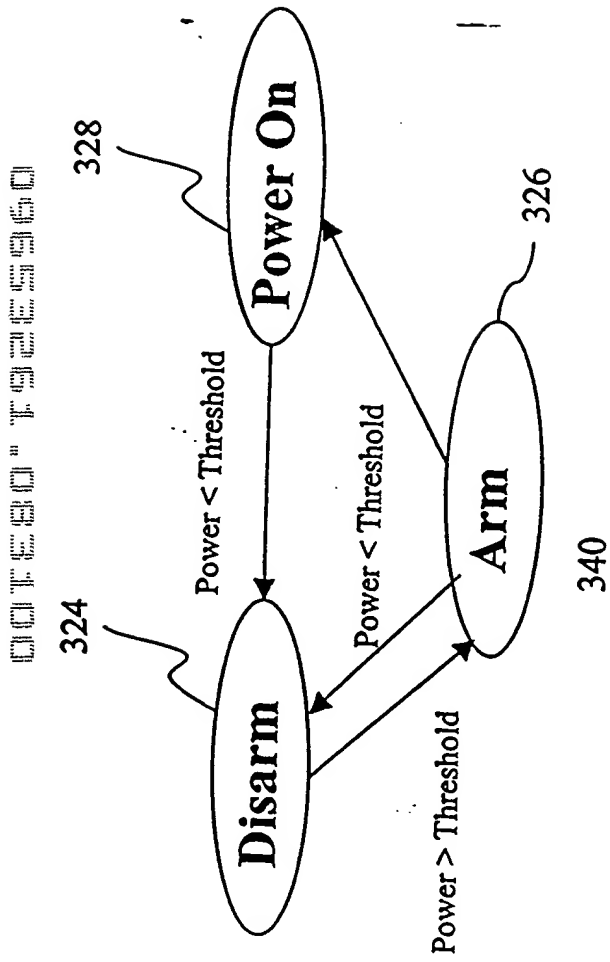


FIG. 17

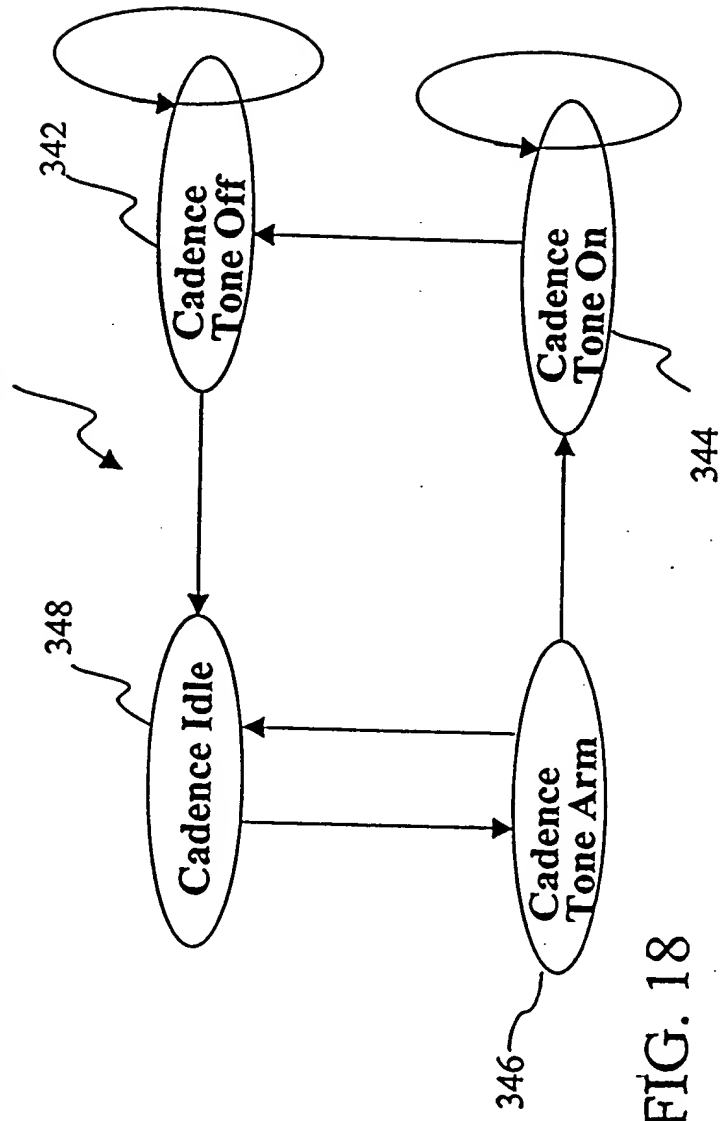


FIG. 18

268

266

Signal
Processor

340

Cadence
State
Machine

350

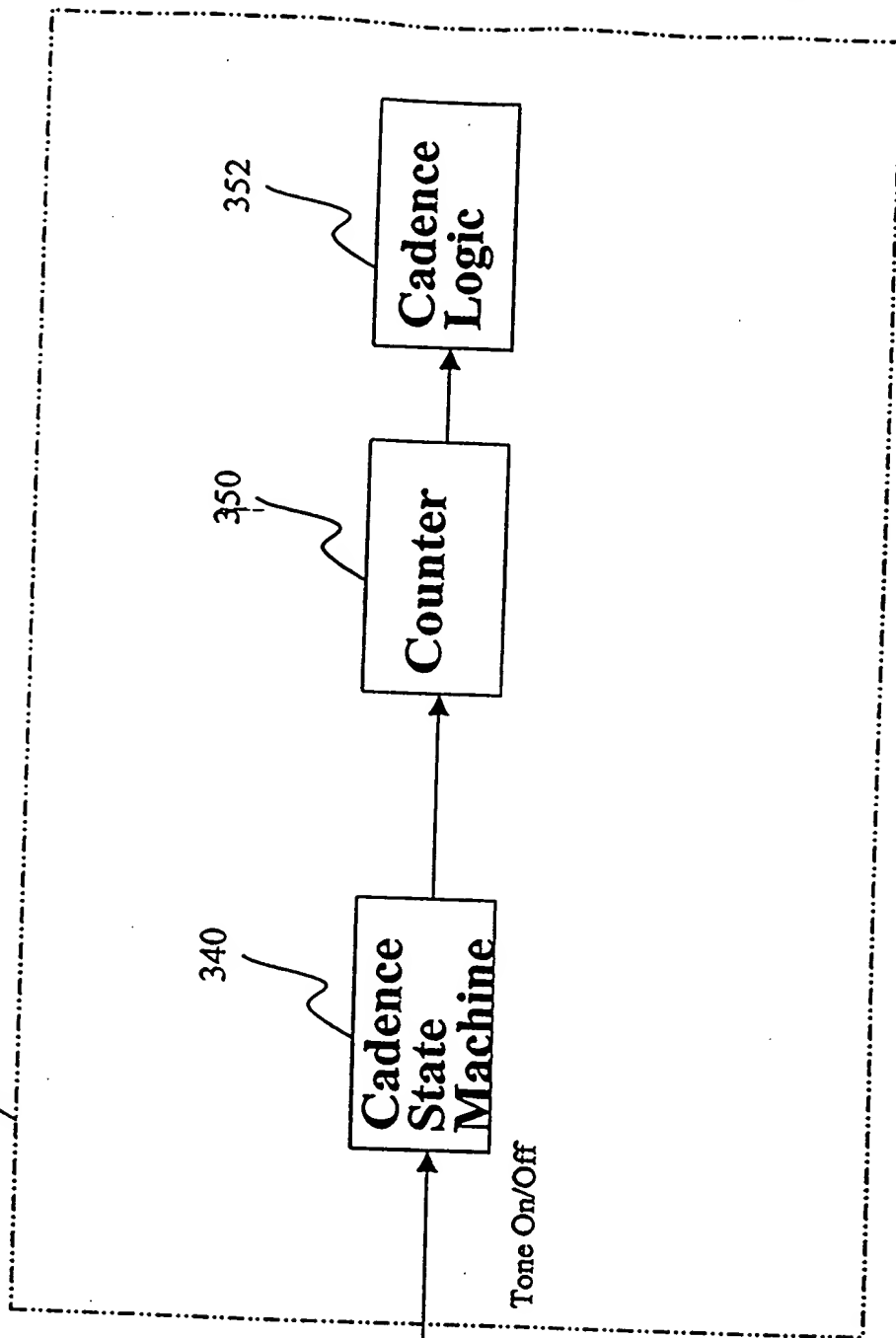
Counter

352

Cadence
Logic

Tone On/Off

FIG. 18A



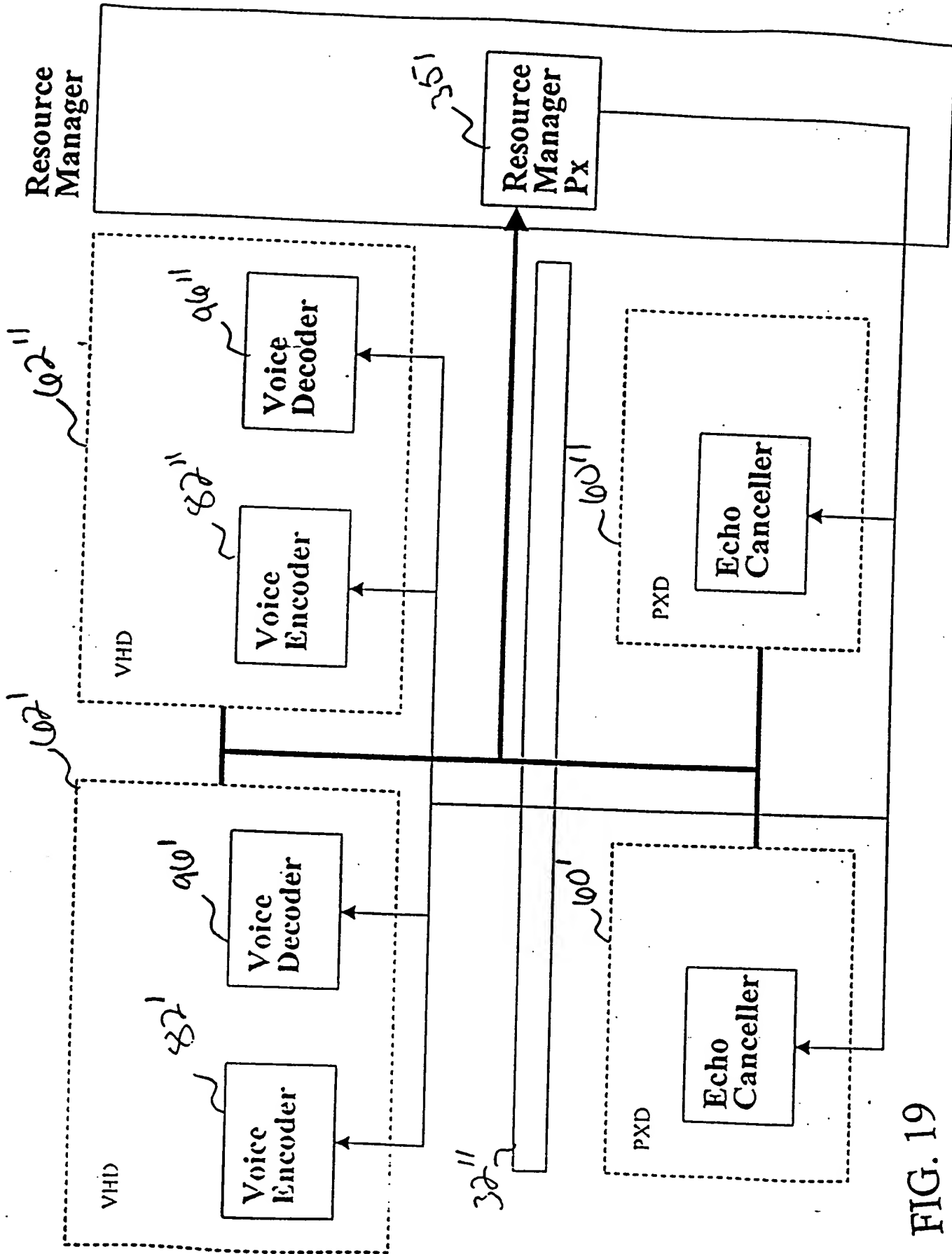


FIG. 19

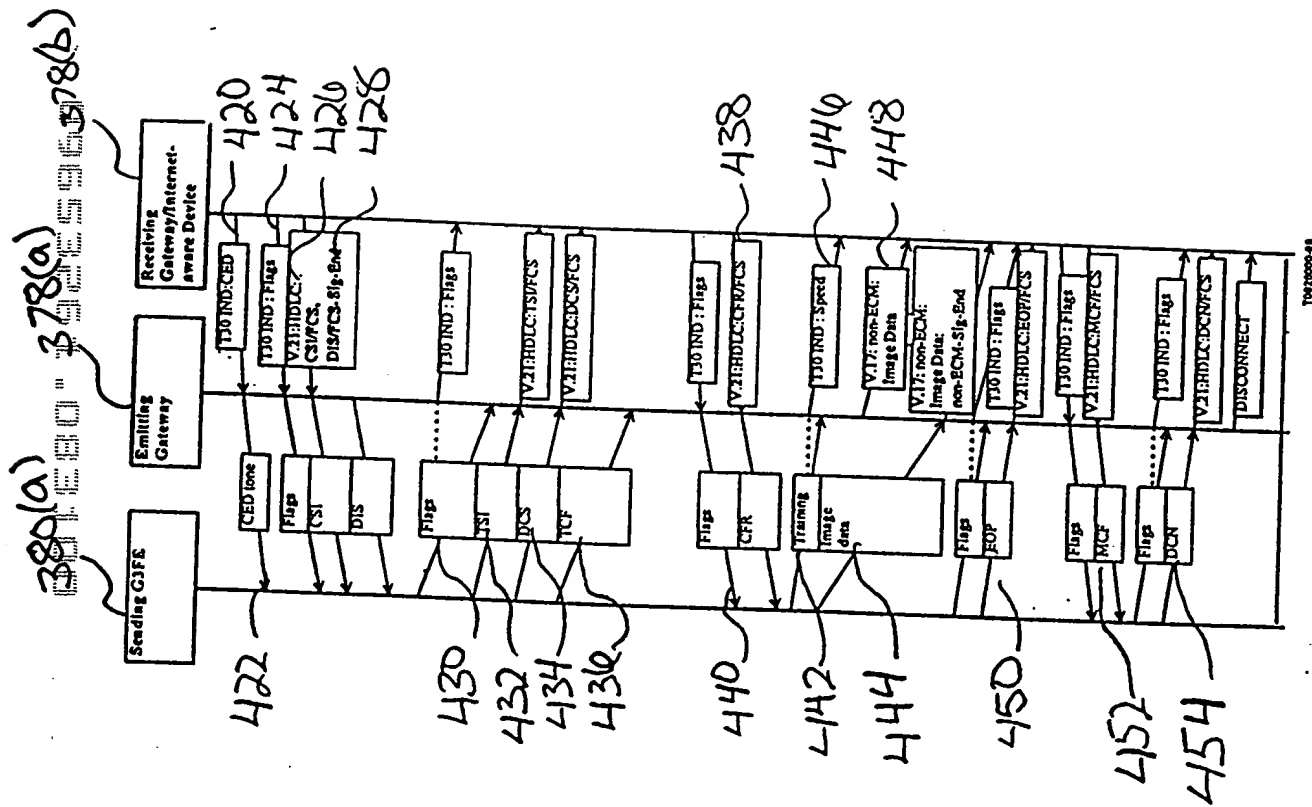


FIG. 22

Fax Spoofing

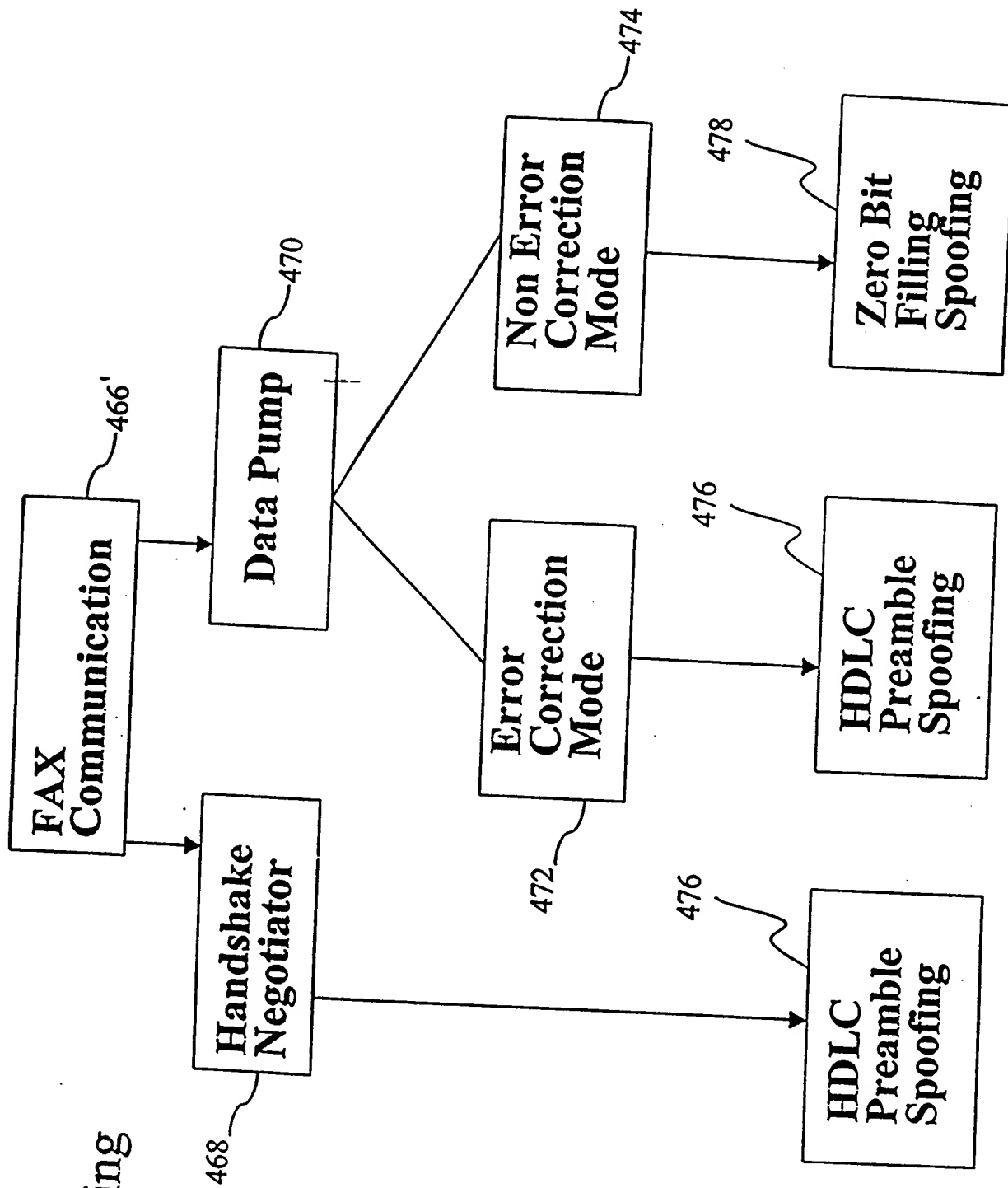


FIG. 23

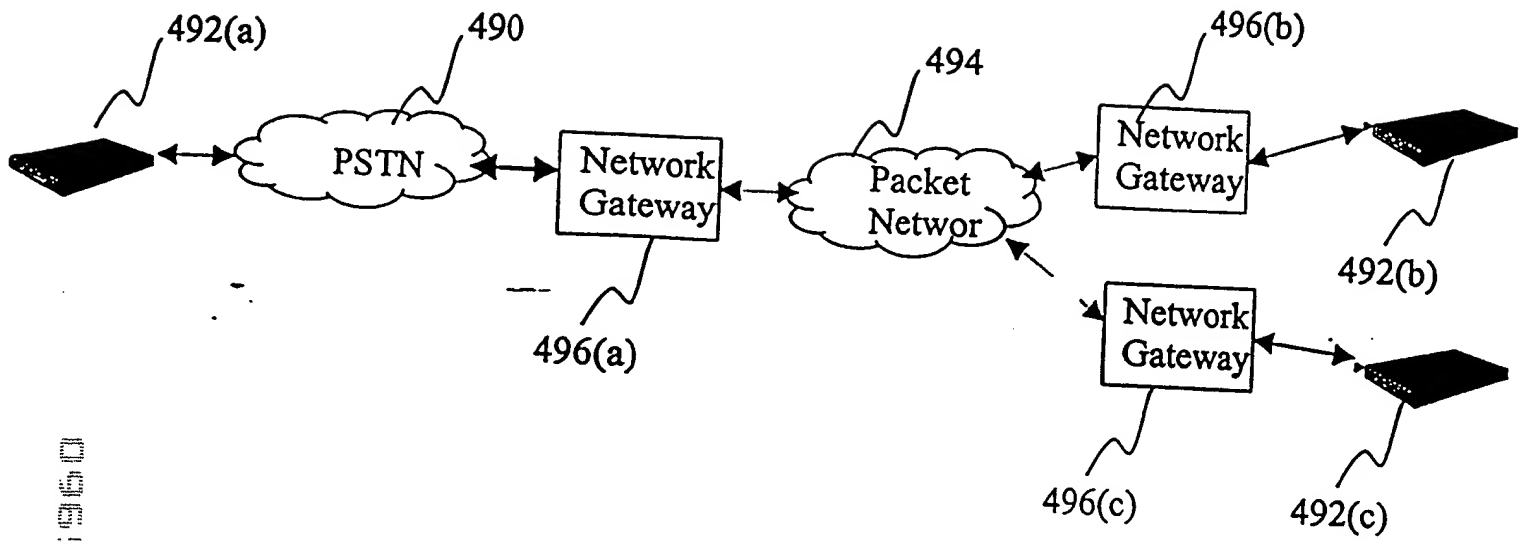


FIG. 24

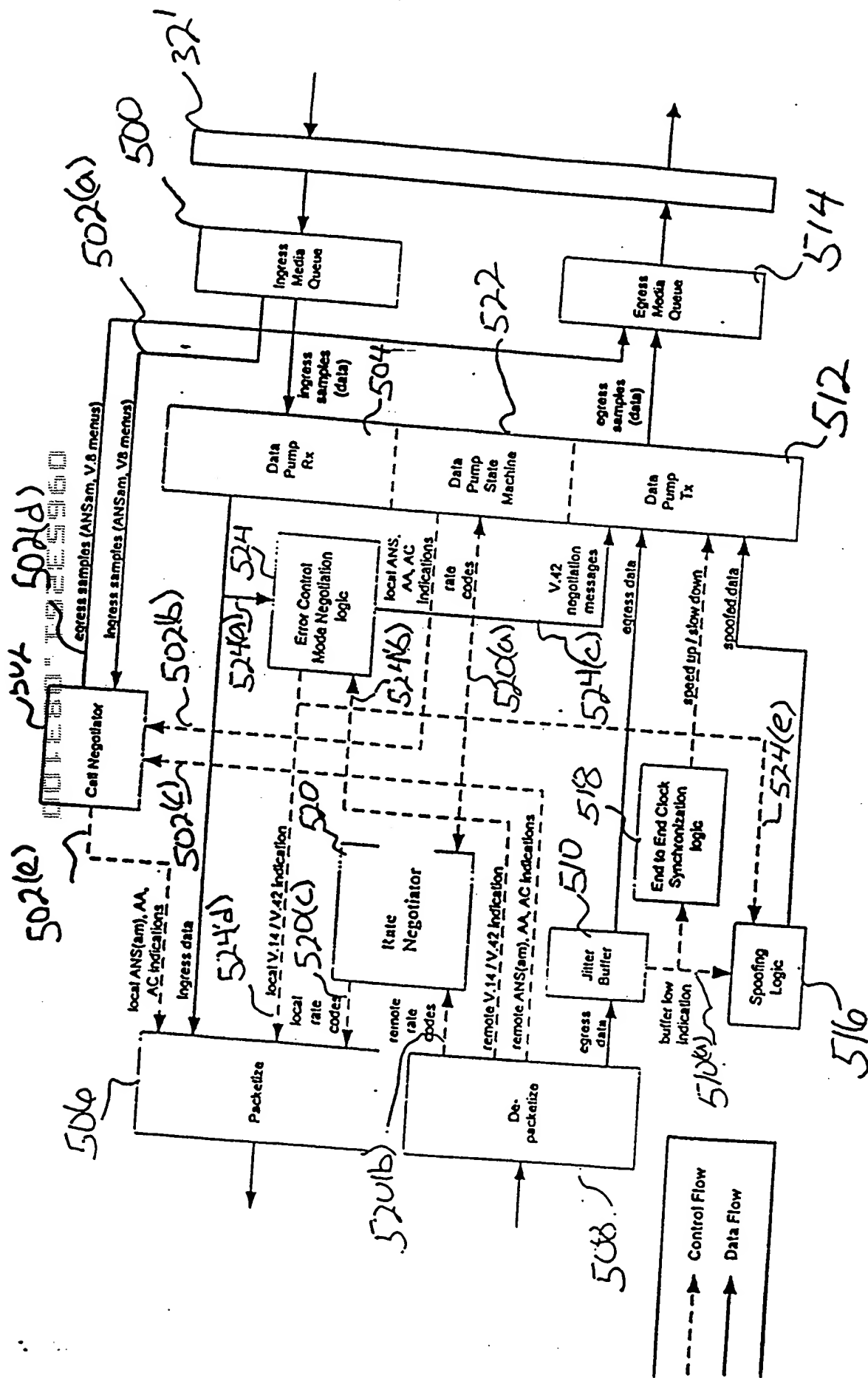


FIG. 25

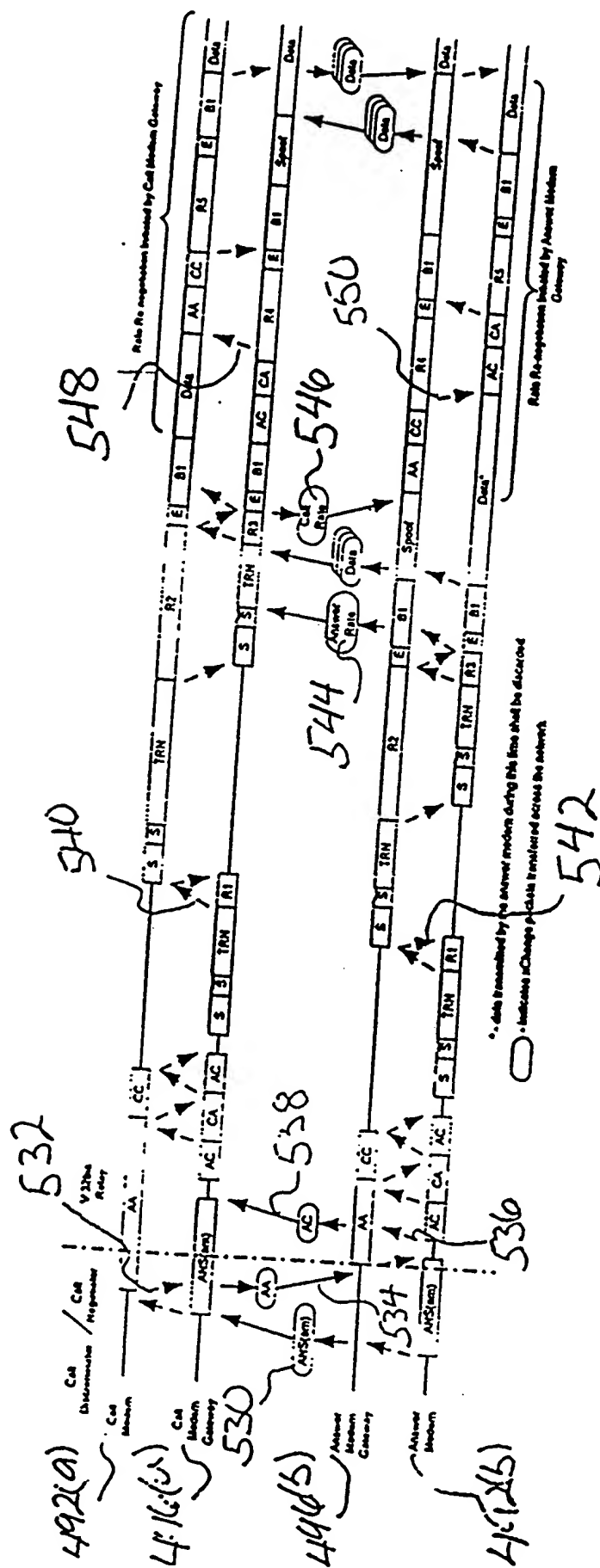


FIG. 26

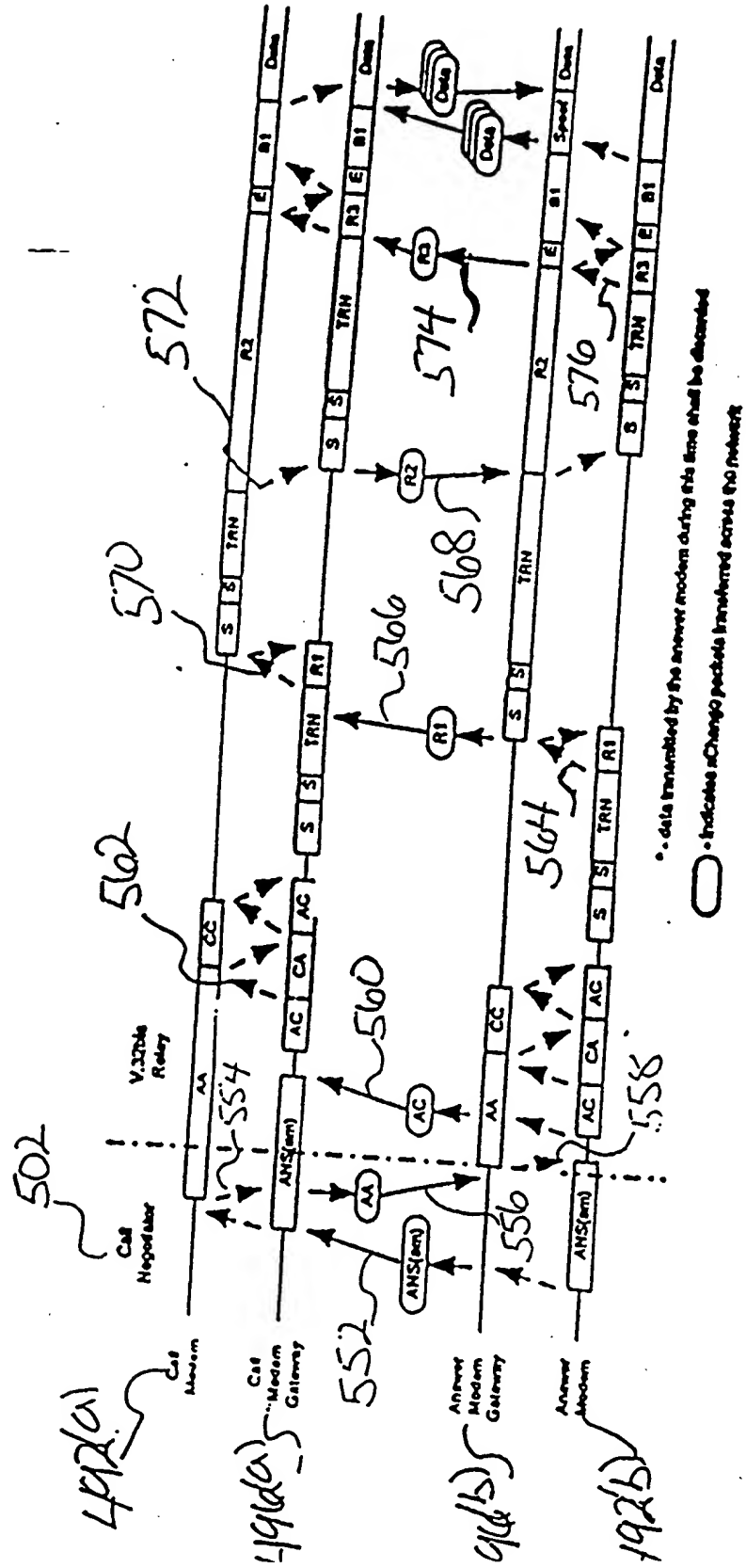


FIG. 27

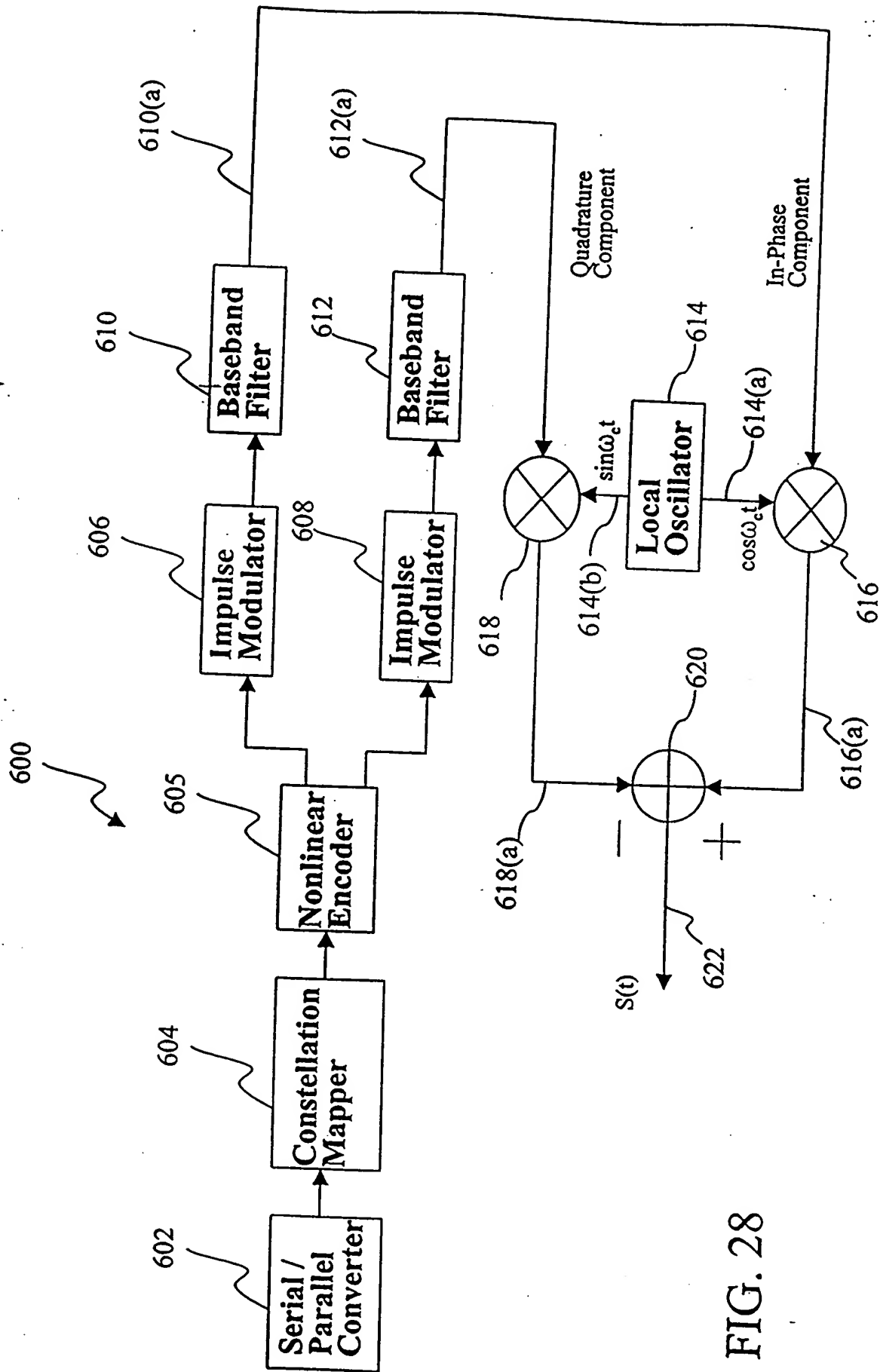
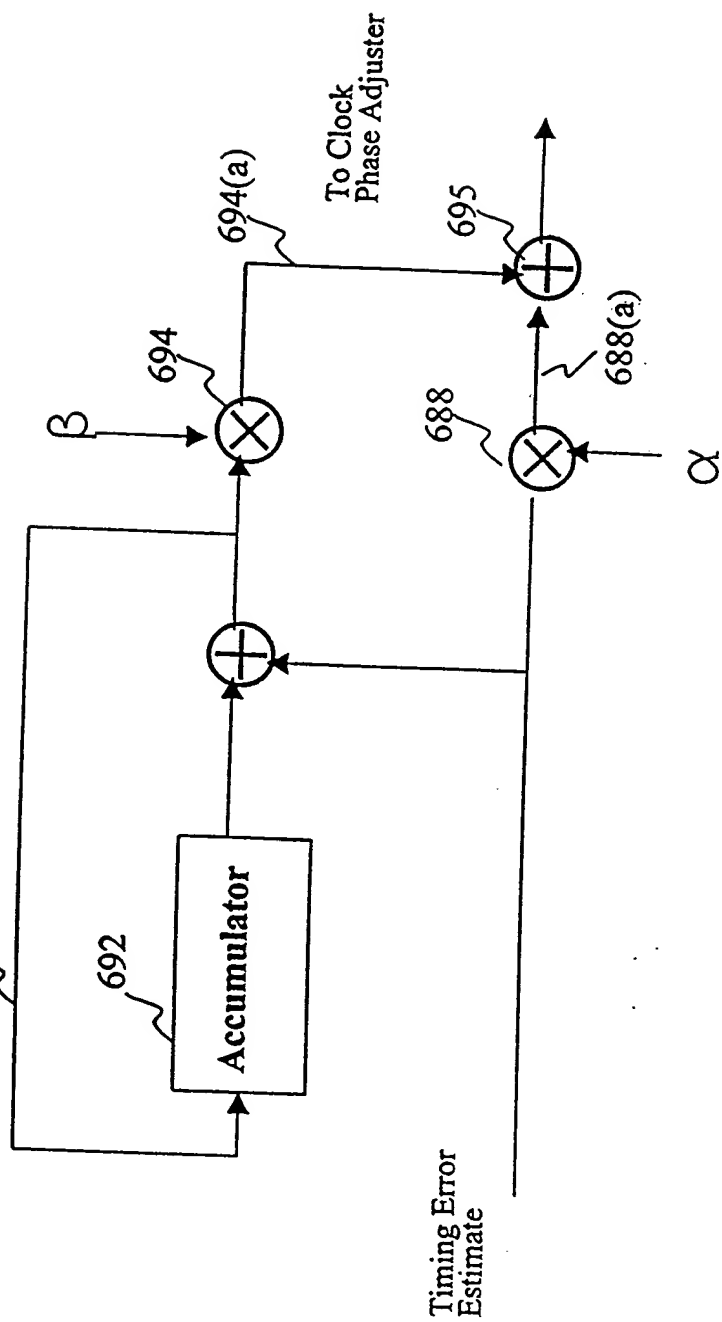
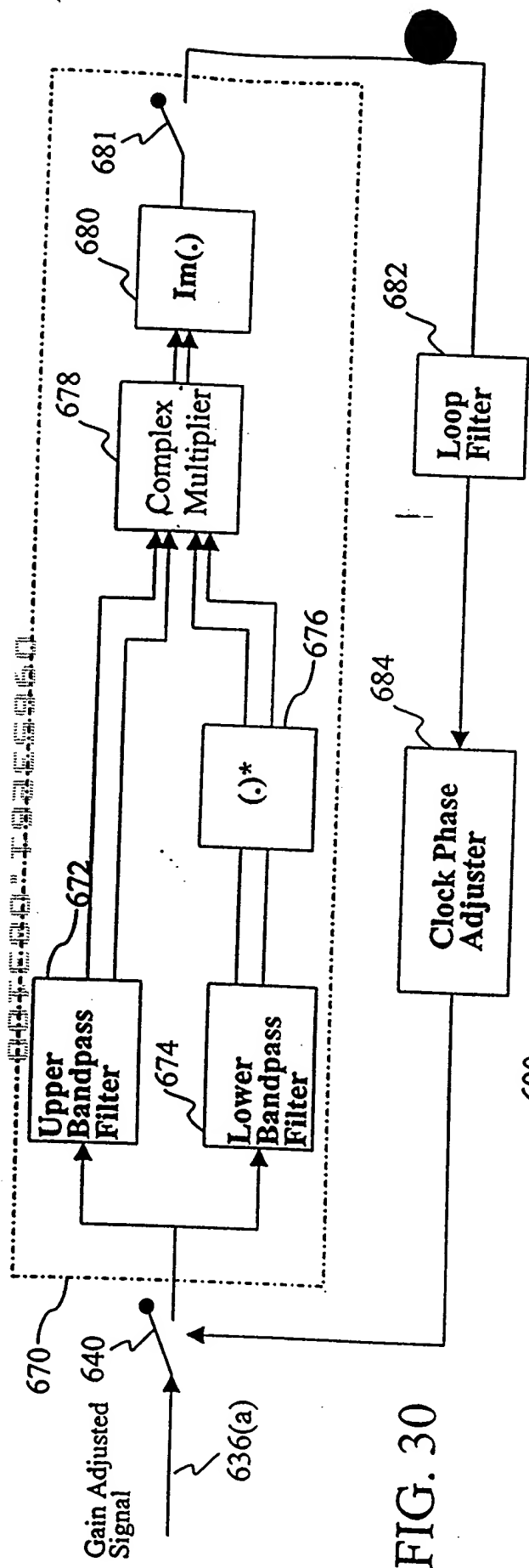


FIG. 28



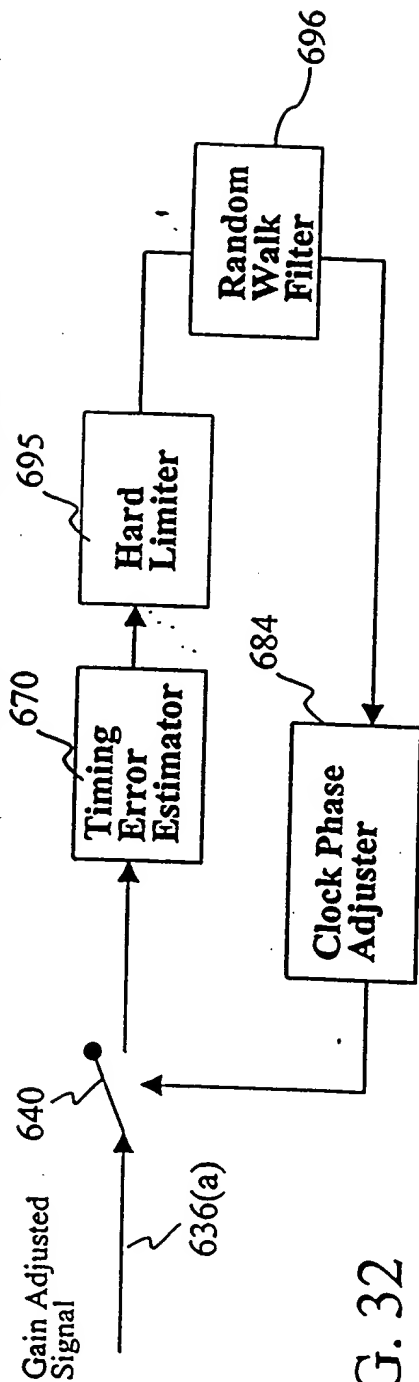


FIG. 32

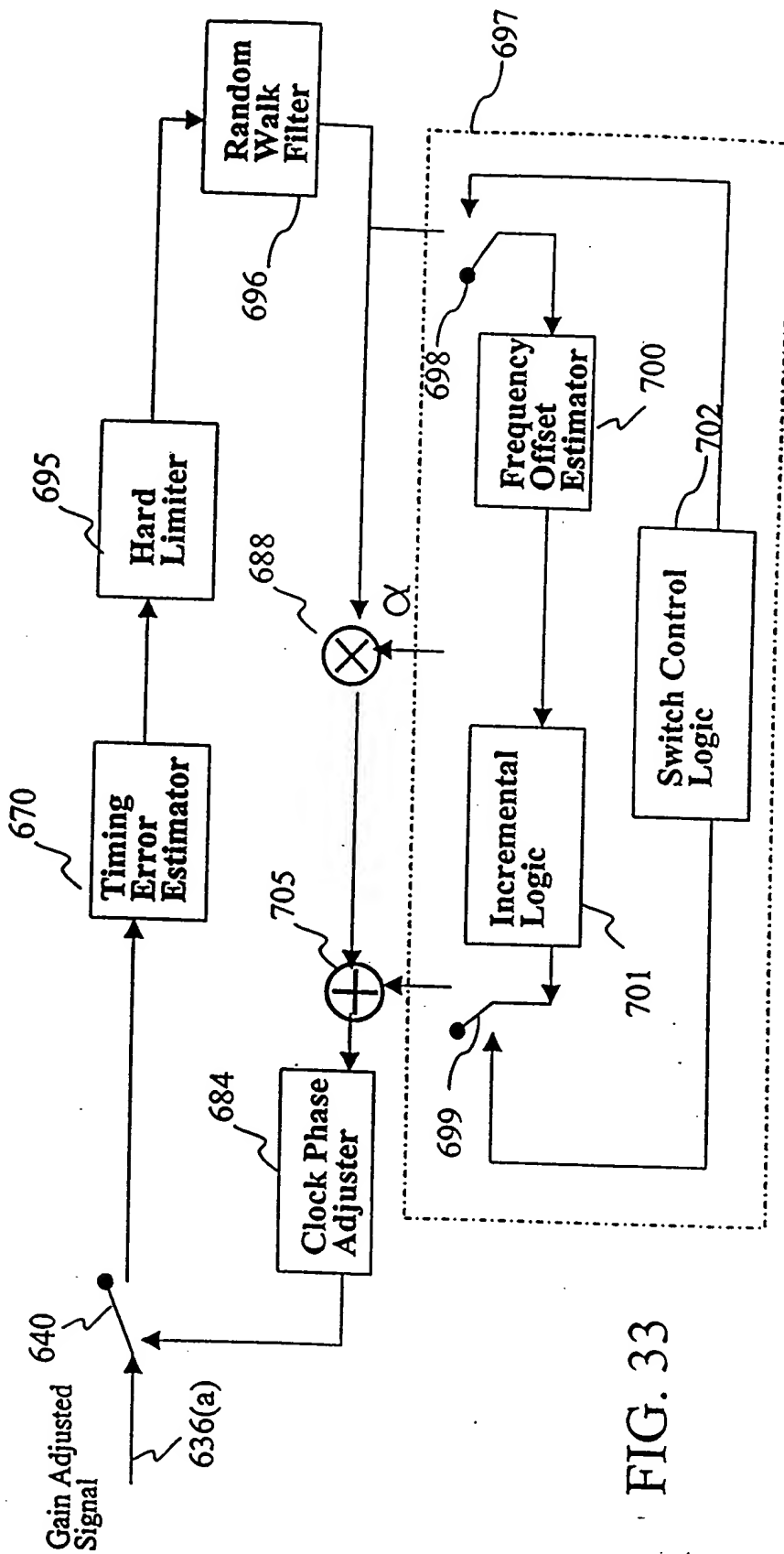
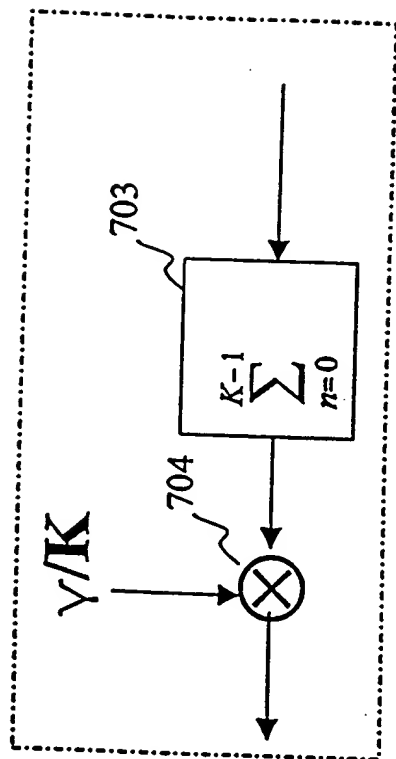


FIG. 33

700



Timing Frequency
Offset Estimate

FIG. 34

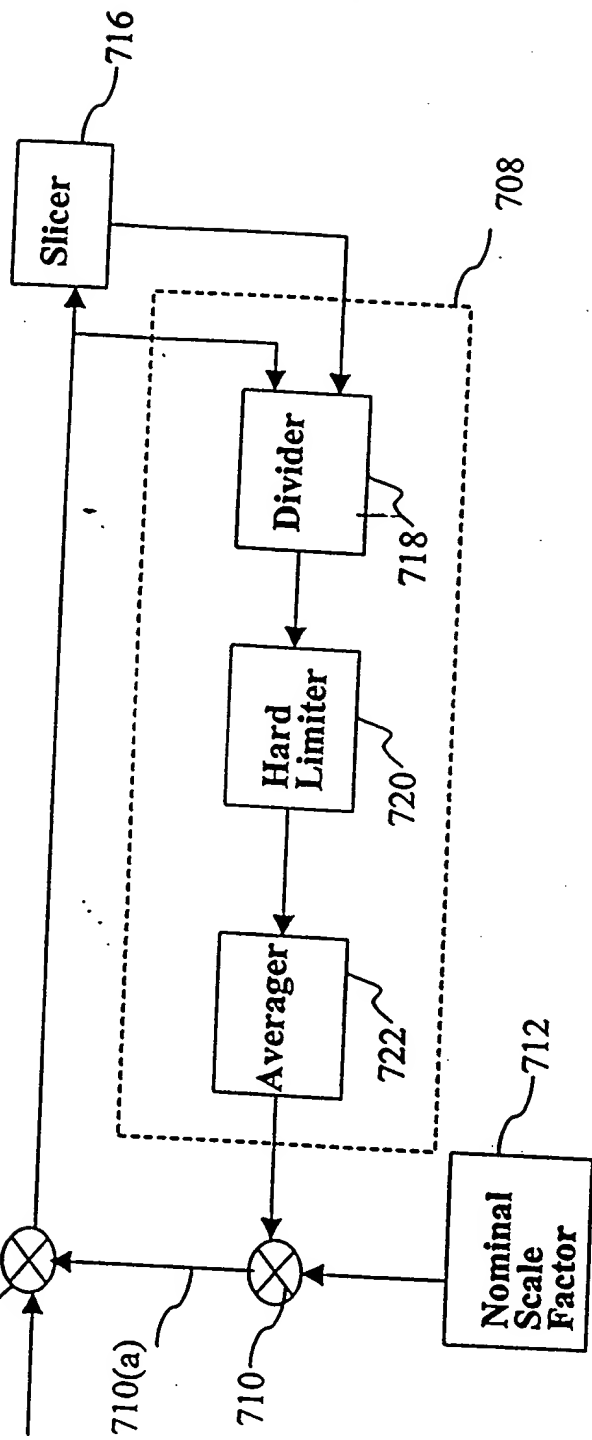


FIG. 35

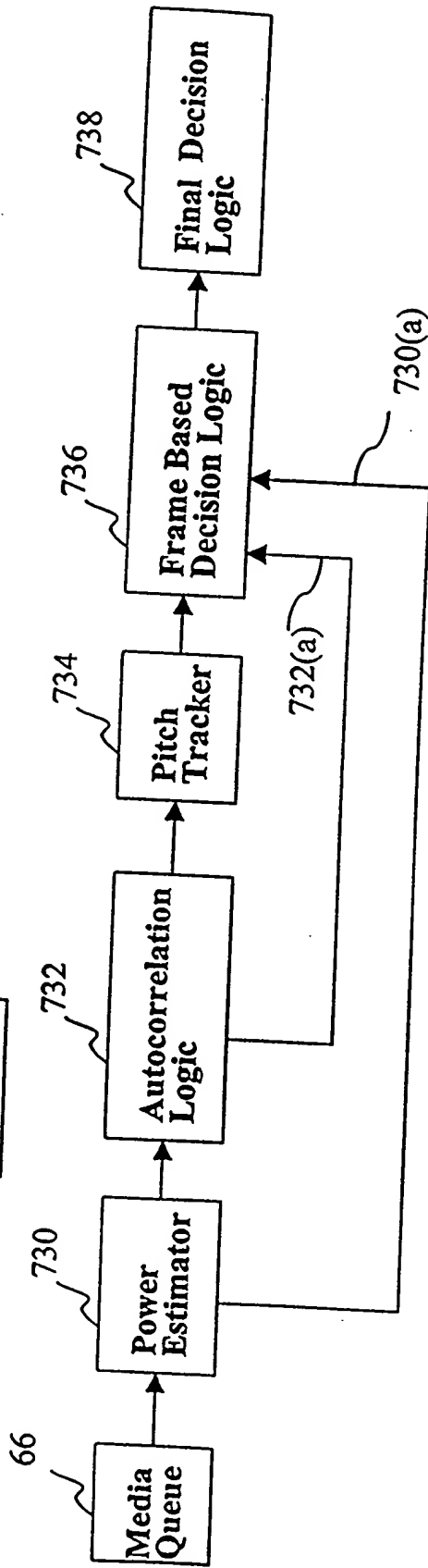


FIG. 36